

U.S. PATENT APPLICATION OF KELLEHER-ANDERSSON ET AL.

CLAIMS

What is claimed is:

1. A method of selecting a neurogenic agent, comprising the steps of:
 - (a) obtaining a stable neural progenitor cell line;
 - (b) plating undifferentiated neural progenitor cells into an assay plate;
 - (c) culturing the neural progenitor cells in a serum-free, mitogen-free medium;
 - (d) exposing the neural progenitor cells to a test agent; and
 - (e) measuring a change in the number of neurons.
2. The method of claim 1, wherein the neural progenitor cell line is derived from mammalian CNS.
3. The method of claim 1, wherein the neural progenitor cell line is derived from human CNS.
4. The method of claim 1, wherein the neural progenitor cell line is derived from human hippocampus.
5. The method of claim 1, wherein the neural progenitor cell line is derived from human subventricular zone.
6. The method of claim 1, wherein the neural progenitor cell line is derived from mammalian pluripotent or totipotent stem cells.

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7. The method of claim 1, wherein the neural progenitor cell line is capable of differentiating into neurons and glia.
8. The method of claim 1, wherein the neural progenitor cell line is capable of differentiating into neurons.
9. The method of claim 1, wherein the test agent is a fused imidazole, as described in Structure Formula 1.
10. The method of claim 1, wherein the test agent is a aminopyrimidine, as described in Structure Formula 2.
11. The method of claim 1, wherein the test agent is a nicotinamide, as described in Structure Formula 3.
12. The method of claim 1, wherein the test agent is an aminomethyl phenoxy piperidine, as described in Structure Formula 4.
13. The method of claim 1, wherein the test agent is an aryloxy piperidine, as described in Structure Formula 5.
14. A method for treating neurodegenerative and neuropsychiatric disorders comprising the step of administering a fused imidazole, as described in Structure Formula 1, to a patient in need thereof.
15. A method for treating neurodegenerative and neuropsychiatric disorders comprising the step of

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administering an aminopyrimidine, as described in Structure Formula 2, to a patient in need thereof.

16. A method for treating neurodegenerative and neuropsychiatric disorders comprising the step of administering a nicotinamide, as described in Structure Formula 3, to a patient in need thereof.

17. A method for treating neurodegenerative and neuropsychiatric disorders comprising the step of administering an aminomethyl phenoxy piperidine, as described in Structure Formula 4, to a patient in need thereof.

18. A method for treating neurodegenerative and neuropsychiatric disorders comprising the step of administering an aryloxypiperidine, as described in Structure Formula 5, to a patient in need thereof.